

"Tannic acid is contra-indicated in hemorrhages and fluxes, wherever situated, which are only the relieving of an obstructed circulation, or of inflammatory or congestive action. It is, under such circumstances, calculated to do mischief. In obstinate constipation of the bowels, when circumstances render a lax state necessary, tannic acid is contra-indicated in large doses, as a general rule. Irritability of stomach and gastritis are liable to be aggravated by tannic acid.

"Several preparations of tannic acid have been carefully prepared, at my suggestion, by Mr. Morson, the eminent pharmacist, of Southampton-row. These preparations are the tannates of quinine, cinchonine, alumina, bismuth, and lead. They are all coloured, possess more or less the styptic taste of tannic acid, and are inodorous. I have not yet had time to make sufficient trial of them, so as to be enabled to report at present upon their virtues. I shall now only hazard an opinion that they, as well as tannic acid itself, will be found, upon full trial, to possess very considerable power, and to form valuable acquisitions to the resources of the physician, wherewith he may render himself more formidable to disease, and still more serviceable to the sick."—*London Journ. Med.*, Jan. 1850.

## SURGICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL SURGERY.

31. *Preparations illustrative of the Mode of Origin of Aneurisms of the Aorta.*—Dr. PEACOCK exhibited to the Pathological Society of London (May 20th, 1850) three series of preparations consisting of,

1st. The upper part of the descending aorta from a man, 29 years of age, who died from the rupture of a small aneurism into the left bronchus. In this preparation are seen two sacculi, each capable of lodging a pea, of a round form, but not very distinctly circumscribed.

2. A portion of the right common iliac artery, removed from a man, 56 years of age, in whom there was an aneurism of the same vessel nearer the heart. The artery was considerably dilated, and immediately above its division there is a small shallow sac, about half an inch in diameter, bounded by a distinct margin below, but very imperfectly circumscribed above.

3. Portions of the ascending aorta of a female, 48 years of age, who died of extensive laryngeal disease. In these preparations are shown four small sacs, all very distinctly circumscribed, and separated by comparatively narrow necks from the cavity of the artery. Two of the sacs are situated on the left side of the vessel, and of these, one is five French lines in diameter at its orifice, and about the same in depth. The other, which is situated below, and somewhat to the right of the first, is altogether smaller. The third and fourth sacs are situated on the right side of the vessel, immediately below the origin of the *arteria innominata*, and the largest of them has a diameter, at its orifice, of seven French lines, and is about eight lines in depth.

In each of these preparations, the internal coat has been separated from the subjacent tunics, so as to show that it formed, throughout, the lining of the sacs. In the first and third series of preparations the middle and external coats, still in connection, are also preserved, to show the intimate adhesion which had existed between all the tunics around the necks of the sacs, and the thinness, or entire absence, of the middle coat at their bases. The internal coat is thus seen to have been gradually dilated and protruded through the middle tunic, so as, in the last series of specimens, to come in contact with the internal coat, leaving the bases of the sacs only protected by the internal and external tunics. These cases, therefore, afforded examples of a kind of *aneurisma herniosum*, though unlike the cases described under that name by Dubois, Dupuytren, and Liston. The third series of cases afforded a good opportunity of observing the mode in which the small sacs were produced. A very copious deposit of atheromatous material had formed in the layer of fibrous tissue between the internal and middle coats, and this was most extensive in the

seats of the small expansions, where, also, it had softened into a diffuent gummy pulp, into which the internal coat, being deprived of its supports, had been gradually protruded, while the fibres of the middle coat were pushed aside or removed by absorption.—*London Med. Gaz.*, June, 1850.

32. *Treatment of Aneurism by Galvano-puncture.* By MM. PETREQUIN and GIMELLE.—It is now some years since M. Petrequin advocated the treatment of aneurism by galvano-puncture, and he has left no means untried, as far as constant publication upon the subject has been concerned, of propagating the practice. He has, however, met with but indifferent success, which is not surprising, seeing that, while the means has proved infinitely more uncertain in its results than the ligature, it requires, according to him, much tact in manipulating with the electricity, and causes the most intense suffering, which even chloroform, in some instances, has failed to prevent. It has been more frequently tried in Italy than elsewhere, chiefly in aneurisms of small vessels, and with only occasionally satisfactory results. We are not aware of its recent successful employment in London and Paris, although we understand M. Petrequin stating as much in one of his papers read before the Academy, wherein he makes no mention of the unsuccessful employment of electricity by Liston and Phillips, long before he himself had taken up the subject. Perhaps the best example hitherto published has been the successful employment of galvano-puncture in the treatment of a subclavian aneurism by M. ABEILLE, an account of which he forwarded to the Academy, upon which M. Gimelle has delivered in an able report. The patient was a lady, æt. sixty-five, and in consequence of the ill success which had hitherto attended the ligature in this description of aneurism, M. Abeille resolved on resorting to galvanism. He employed twenty-two pairs of plates, of ten centimetres in diameter, and four needles. Notwithstanding that chloroform was given, the sufferings of the patient are described as having been horrible, several persons being required to restrain the consequent convulsive movements. After thirty-seven minutes of extreme suffering, the tumour was found to have become hard, resisting, and destitute of pulsation. Moderate compression was maintained above the tumour for ten hours. It had quite disappeared in thirty-seven days, and the cure, now three years old, has held good, the radial pulse being somewhat feebler than on the sound side.

M. Gimelle, in his Report, passes in review the various cases in which galvanism has been employed, and shows that several of these were unsuccessful in even M. Petrequin's hands, while other surgeons have met with suppuration and gangrene of the sac and other accidents. So impressed is he with the numerous dangers and ill-successes of this operation, that he wished the Academy to pass an absolute condemnation upon it. This, however, was considered as too extreme, since cases in which the ligature could not be employed, or had been so usually without success, might sometimes prove amenable to this procedure. This was the view taken by M. Velpeau, who, having lost a patient from inflammation of the sac of a popliteal aneurism, for which he had employed galvanism, is naturally not prepossessed in favour of it. He believes that, in cases analogous to that now related, it should be resorted to. M. Robert took the same view, believing it should be confined to cases in which the ligature is difficult or impossible. M. Laugier, judging from a case which had occurred to himself, in which the sac of a brachial aneurism was obliterated, considers that the operation may sometimes even be advantageously employed in aneurisms of the extremities.—*Brit. and For. Med.-Chirur. Rev.*, from *Rev. Med.*, vol. i. 1850, and *Bulletin de l'Acad.*, vol. xv.

33. *Treatment of Aneurism by Compression.*—Sir B. BRODIE, at a dinner given to him by the president and council of the Royal College of Surgeons, Dublin (29th August), in returning thanks for the honour done him, said that "It was not then the time to speak of the many improvements in scientific surgery made by some of the Irish surgeons; but he could not refrain from mentioning one of the latest. The mode of curing the formidable disease of aneurism by a bloodless operation was brought into notice by Irish surgeons, and would, he was convinced, supersede every other plan."

34. *Ulcer of Duodenum after a Burn: fatal in four and a half days by hemorrhage.*—Mr. CÆSAR HAWKINS exhibited to the Pathological Society of London (May 20th, 1850) a specimen of this description, and remarked that the influence of a severe burn upon the mucous surface of the intestines had been well known since Dupuytren first pointed out the existence of great congestion in such cases; in consequence of which observation many cases of ulcers in the duodenum had been since discovered.

Mr. Samuel Cooper had recorded two such cases about twelve years ago. Mr. Long had described some others in a paper on the general effects of burns. Mr. Curling had described six others in the *Medico-Chirurgical Transactions*, one of which had been observed at St. George's Hospital, and some cases occurring in the same hospital had been published in the *Transactions of this Society*, by Mr. Hunt. Of the connection of such ulcers with burns there could then be no doubt, though why the duodenum was especially selected in preference to the other small intestine, did not appear very plain; still less, why the upper part of the duodenum alone, close to the pylorus, was the part in which they were almost always found.

In some cases, there appeared to be no sign of the existence of these ulcers during life, but in many others they proved the immediate cause of death, producing pain in the epigastrium, and vomiting, and terminating fatally, sometimes by ulcerating into the peritoneum, sometimes by hemorrhage; in which latter case blood may be brought up by vomiting, or passed in the evacuations, or discharged in both ways; and in one case of Mr. Cooper's, blood was found between the stomach and colon, after ulceration had taken place through the peritoneum; the fatal result of these ulcers seemed to take place at very various ages, though generally in young persons, and also at very different periods after the accident. With regard to hemorrhage, it is singular that, while it occurred in six out of ten cases seen or collected by Mr. Curling, the case now before the Society is the first in which Mr. Hawkins had himself known it fatal.

The patient was a little child, six years of age, admitted after a burn of the arm, and upper part of the body and side of the face, and not affecting the duodenum. There was some collapse at first, after which the child seemed to go on pretty well for four days, but just after the expiration of the fourth day it became suddenly faint, and weak, and sinking, and died on the following morning, exactly four days and a half from the burn, having been, as far as was known, in perfect health before that time. There was no vomiting of blood, or discharge by the bowels, so that when Mr. Hawkins found it had died he was at a loss to account for the fatal collapse at this period after the accident. On looking for the existence of an ulcer in the duodenum, as he usually did, he found this part full of blood; and many other parts of the small and great intestines, down to the rectum, contained also some blood.

In the upper and back part of the duodenum, very near the pylorus, may be seen an ulcer, which appears smaller from contraction after its immersion in spirits, but which, when examined, was about an inch and a quarter long, and nearly three-quarters of an inch in breadth. It had exposed the muscular fibres at the lower part, but nearer to the pylorus it may be observed to have gone through this coat towards the pancreas, and crossing it may be seen an artery or large branch of the pancreatico-duodenalis, close to its origin, which now has a bristle within it, but could be seen by the eye as if half of the vessel had been cut off for half an inch of its course; the vessel having doubtless been the source of the sudden and fatal hemorrhage.

Mr. Hawkins remarked that he had looked through the dates of the fatal result of these ulcers, and found only one which approached to the rapidity of the present case; it was one of those recorded by Mr. Cooper, in which vomiting of blood had been noticed on the sixth day, and the child died on the seventh day; while in Mr. Hawkins' case the collapse took place just after the completion of the fourth day, and in four days and a half from the occurrence of the accident the child was dead.—*London Med. Gaz.*, June, 1850.

35. *Laryngotomy and Tracheotomy.*—The question whether the operation of laryngotomy or that of tracheotomy should be performed for the relief of as-

phylia, resulting from obstruction of the larynx, whether that disease be acute, or consecutive to a chronic affection of the organ of voice, is of very considerable importance to the practical surgeon, and has been most satisfactorily answered in favour of laryngotomy in a very interesting paper published by Mr. P. Hewett in the *London Journal of Medicine* for February, 1849. In this communication, Mr. Hewett states that, in all cases of acute inflammation of the larynx in adults, and in those cases that occur in children from swallowing boiling water or other irritating fluids, the obstruction is seated *above* the inferior vocal chords; the mucous membrane covering them, or that below them, not being in the slightest degree thickened; and that consequently, as laryngotomy is a much simpler and safer operation than tracheotomy, it ought to be preferred in these cases.

JOHN ERICHSON, Esq., states that he has been led to a similar conclusion in favour of laryngotomy by an inquiry into this subject, on which he entered some time since, and in the course of which he examined various recent specimens of inflamed and obstructed larynx, and those preparations of disease of this organ that are preserved in several of the pathological collections in London, without being able to meet with one in which an opening in the crico-thyroid membrane would not have relieved the asphyxia equally as well as one in the trachea. This examination determined him in future to have recourse to laryngotomy rather than to tracheotomy in acute obstructions of the glottis, whether primary, or supervening in chronic ulceration or disease of the part. This determination was strengthened by the result of the post-mortem examination of two cases in which he had performed tracheotomy—the one, of old syphilitic disease of the larynx, followed by acute oedema; the other, of erysipelas of the glottis, in both of which the obstruction was found to be situated above the inferior vocal chords.

36. *Treatment of Stricture of the Urethra by Caustic.*—Mr. BROWN read to the Medico-Chirurgical Society of Edinburgh a letter from the late John Walker, detailing the mode employed by the latter of treating strictures of the urethra by the application of potassa, and exhibited the instruments used for the purpose.

Prof. SYME stated that the opinions of Mr. Walker were not new to him; for, after that gentleman's retirement from practice, he had often conversed with him upon the same subject, which was so fully treated of in the letter just read by Mr. Brown. Mr. Walker was certainly a talented and enthusiastic practitioner, and was actuated by the best intentions in advocating the treatment of stricture by caustic. His principle was to apply the potassa to the sides of the stricture, and not to rest satisfied with pressing his caustic against its anterior extremity. Members might judge for themselves whether the mechanical contrivances exhibited could possibly accomplish this object. Now-a-days, when such an instrument as he held in his hand, of the full size of the healthy urethra, could be passed through a stricture, further dilatation would be hardly thought necessary. As to the cure of a very tight stricture by any such means, he believed it to be quite impossible. It was also remarkable that Mr. Walker and others, who recommended the use of caustic, reserved the nitrate of silver for the most intractable cases, and used the potassa (a far more unmanageable and destructive agent) in treating cases in which ordinary dilatation would have effected a cure. Forty years ago, Mr. Benjamin Bell collected the opinions of the most celebrated surgeons in London and in the provinces upon the subject of the treatment of stricture by caustic; and by the kindness of his grandson, Mr. Benjamin Bell, he had just been put in possession of these opinions. They consisted of letters from Mr. Pearson of London, Mr. Hey of Leeds, Mr. Park of Liverpool, and other men of note; and the arguments against Sir Everard Home's practice, which were urged by these eminent surgeons, were precisely such as were used at the present day. They detailed cases in which the practice had induced enormous mischief, by hemorrhage, fistula, hernia humeralis, and obliteration of the urethra. Although the fear of opposing the fashionable practice of the day had, forty years ago, deterred these gentlemen from publishing their opinions, there was now fortunately no occasion for such reserve; and accordingly, with Mr. Bell's permission, he proposed soon to lay before the public a part, at least, of this interesting corre-

spondence. The caustic was now condemned by the majority of the profession as dangerous. Simple dilatation by the bougie was held to be the appropriate mode of treatment for most cases; and his own opinion was that, when a case was not benefited by this plan, the division of the stricture, by cutting on a grooved instrument passed through it, would safely effect a cure. But upon one point he must particularly insist—a grooved instrument must be passed as a preliminary step in the operation. Objections had been urged against his operation, founded on the unsuccessful result of certain cases of so-called impermeable stricture, which had been treated by passing an instrument down to the seat of obstruction, and then groping for the canal behind it with the bistoury. He had found it necessary to point out the essential difference between this operation and the one which he had himself recommended: and had been asked in return, what treatment he proposed for cases of *impermeable* stricture? He had replied that he had never met with a case in which an instrument could not be passed through a stricture, and that he would be happy to pay the travelling expenses of any patients sent to the Royal Infirmary, with certificates of impermeable stricture, signed by a London hospital surgeon. He trusted that he could demonstrate, by the public treatment of such cases, that the impermeability had no real existence when tested by the careful use of bougies of sufficiently small size.

Dr. MACLAGAN had witnessed Sir Everard Home's practice in St. George's Hospital, many years ago. The use of the caustic caused an amount of suffering which it was painful to recall; it was followed by hemorrhage in a great number of cases, probably amounting to a tenth of those treated; it never effected a cure which could not be attributed to the simple dilatation of the urethra by the bougies employed; and relapses were extremely frequent in Sir Everard's practice. It was well known that the results observed in Calcutta by Dr. Hare, in the practice of certain surgeons who used the caustic, were anything but favourable.

Mr. KERR mentioned a case in which a French surgeon in Malta had inflicted such injury on a patient's urethra by the application of the caustic, that he was obliged to send him to England to be cured.—*Monthly Journal Med. Sci.*, July, 1850.

37. *On Iodine Injections in Hydrarthrosis.*—When recently dismissing two patients in whom he had successfully used iodine injections, M. VELPEAU took a general review of the present state of the question of the propriety of employing them in dropsical joints, his observations forming a sort of appendix to the celebrated Academic discussion, a few years since.

He observed that the ill success recorded by Boyer and other surgeons, as resulting from throwing injections into joints, much alarmed practitioners; the mischief which resulted, however, really depending upon the nature of the cases which were selected and the procedure adopted. M. Velpeau appealed against the abandonment of the practice on these grounds. For fifteen years he had employed iodine as an injection in hydrocele, without any dangerous inflammation being excited, so that he was encouraged to extend its application to various serous cysts; and in his "*Operative Medicine*," published in 1839, he suggested that it might without danger be thrown into the peritoneal cavity, an opinion afterwards confirmed by its injection into congenital hydrocele and hernial sacs. It was only in 1840, however, that he ventured to inject the knee-joint in two instances, and that by accident, the tumour in the ham communicating with the cavity of the joint. The good success of these cases, and of others in which joints were purposely injected by M. Bonnet, of Lyons, led him, however, to adopt the practice in numerous other cases. At least fifty such, treated by different surgeons, are now on record, in none of which were any alarming symptoms developed. The dangerous and fatal consequences resulted, in Boyer's cases, from the joint being widely laid open, and irritating fluids several times thrown in; while in the modern operation the smallest possible trocar is employed, and, in the majority of cases, a single injection suffices. The pain and febrile action in some cases have been considerable, requiring for their removal, in the opinion of some surgeons, leeching and abstinence; but M. Velpeau has always found them, as in the case of their



appearance in hydrocele, if let alone, gradually disappear. Their occurrence at all is, indeed, rare. In general, a little redness, pain, and swelling are observed after the injection, and are soon followed by slight fever. Increasing during three or four days, these symptoms then become stationary; afterwards to diminish, and to entirely disappear about the fifteenth day, together with a part, or sometimes all the tumefaction.

M. Velpeau now considers there is not more danger in injecting a joint than the tunica vaginalis, the chief fear being, indeed, that the operation may fail. Injection, in fact, succeeds best in proportion as the cavity more nearly approaches a simple serous one. Thus, in cysts of the neck, where the membrane containing the fluid is everywhere surrounded by soft tissues, the operation never fails. In the tunica vaginalis, where the testis places the serous membrane in a less favourable condition, failures are sometimes, though very rarely, met with; while in the joints, in which the serous membrane is free only to a limited extent, and chiefly lies on solid or very hard parts, success is more rare. Still, as the employment of injection is not preventive of other means, is not dangerous, and scarcely more painful than a blister, we should always resort to it, when a simple collection of fluid resists ordinary treatment. As, however, such collections are usually capable of being dispersed, it is an operation not often demanded, and it should not be resorted to when the collection of fluid is dependent on caries, necrosis, &c. The fears entertained by some that ankylosis might result, are unfounded, the patient recovering the use of the part as soon as the swelling has disappeared.—*Gazette des Hôpitaux*, No. 58.

The French practitioners do not seem to have taken much notice of the writings of Dr. Borelli, of Turin, upon the employment of iodine injections in various affections, although he has been one of their most active advocates. In the last paper we have seen, he reiterates his opinion of their great utility, and furnishes additional cases. These consist of examples of *hydrocele* (he states that hydrocele in boys and hydrocele of the cord in adults are always curable by simple puncture), *encysted tumours* after the evacuation of their contents, various forms of *acute* and *chronic abscess*, and *adenitis*. He objects to the use of resolutives, as being both tedious and useless. When matter is once formed, the abscess is rapidly cured by the injection. He relates, too, a case of *ranula* yielding to the employment of the injection, although simple puncture had repeatedly failed. Bouchacourt had, however, already published a similar case in the *Bull. de Thérap.* for 1843. After quoting a case of *fistula in ano* successfully treated by Van Camp at Angers, and relating one of his own, he states he has always hitherto failed in treating *fistulæ* in connection with diseased bone, but quotes cases from the veterinary practice of Professor Peroscino, in which the iodine was successfully used in fistula connected with diseased cartilage.

Dr. Borelli considers his practice in treating abscesses by this means as somewhat peculiar, inasmuch as he seeks to obtain union by the first or the second intention, according to the requirements of the case. The suppurative process being well determined, and the acute inflammation of surrounding parts repressed by cataplasms, after opening the abscess in its most dependent part, and evacuating the contents as far as possible, he introduces a small syringe through the aperture, and throws in pure tincture of iodine with some force, allowing it to remain in, when the pain is not too great, about half a minute. He waits three or four days to see whether the plastic effusion into the pyogenic cavity will effect its occlusion. This, however, is seldom the case, unless the abscess is very small and the engorgement of surrounding tissues slight. The injection, therefore, will require repetition every two or three days, according to the amount of reaction produced; and when this is in excess, emollient cataplasms are required. The author has never seen any ill effect, local or general, following the employment of the iodine.—*Omedei Annali*, vol. cxxviii. pp. 79–154.

The question of injecting the abdomen with iodine in *ascites* is no longer one of mere hypothesis. M. Dieulafoy resorted to it three times in the same subject, with the effect of producing a cure; and Dr. Leriche, of Lyon, has recently published two cases, in which a single injection after the complete evacuation

of the fluid sufficed. M. Boinet also has recently presented a memoir to the *Société de Chirurgie*, in which he has collected eighteen cases of ascites from various sources, wherein different substances, as gases, water, iodine, &c., have been injected. In fifteen of these, success followed, and only in one did the patient die, iodine seeming to be the especially preferable substance. M. Morel, reporting upon this paper, pronounced an almost unqualified opinion in favour of the practice; but MM. Vidal, Gosselin, Robert, and others protested against drawing any such hasty conclusions from cases the history of which had been imperfectly given, and have to be confronted with others in which a fatal termination has resulted, an example of which has recently occurred in Paris.—*Brit. and For. Med.-Chirurg. Rev.*, July, 1850, from *L'Union Médicale*, Nos. 17, 18, 19, and 60.

38. *Chloroform in Orchitis*.—As surgeon to a venereal hospital, M. Buisson has had ample opportunity of testing the value of the different modes of treating this painful disease; and he has come to the conclusion that, of all these, the local application of chloroform is by far the best, whether used in the simple, the blennorrhagic, or the rheumatic variety of the affection. It is chiefly in very painful cases that he resorts to it, after the use of leeches; but, used as soon as pain appears, it may even act as an abortive. A compress of several folds is wetted with the chloroform and accurately applied to the testis, covering this with oiled silk, and placing the whole in a suspensory. The first day, this is renewed every three hours, and continued the next day, if required. For some minutes after, it causes great heat and redness of the part, which is soon followed by a diminution of the original pain. The relief of pain is, in orchitis, the first step towards a cure of the disease; and with the proper combination of internal means this is accomplished in half the usual time, the chloroform being suspended as soon as an improvement is visible. The number of cases M. Buisson has thus treated now amount to about sixty, and he has found the remedy no less efficacious in what he calls ileo-scrotal neuralgia.—*Brit. and For. Med.-Chirurg. Rev.*, July, 1850, from *L'Union Médicale*, No. 4.

#### OPHTHALMOLOGY.

39. *Structure and Optical Properties of the Eye*.—VALÉE states that he has found, by a comparison of Krauss's measurements of the dimensions of the eye, that the exterior convex surfaces have exactly that geometrical form (curved surface of the fourth order, Herschel's "Treatise on Light") which produces foci free from deviations. He calls them *optoidal* surfaces; and also finds that the posterior convex surfaces are, at least, so far optoidal as the pencils of light penetrating into the eye infringe upon them. In a subsequent memoir, Valée applies to the eye the proposition that of a series of refracting surfaces of any form, which are penetrated by rays issuing from one point, one may always be so selected that all the rays are again concentrated into one focus. He is of opinion that the cornea always receives, through the muscles of the eye, the form requisite for the production of sharply-defined images on the retina. These changes of form might be smaller, the less the form of the other refracting surfaces differs from that of the optoidal surface. (*Compt. Rend.*, xxiv. p. 676; *Ibid.*, xxv. p. 501; and *Liebig's Report*, vol. i. p. 166.)

*Dispersion of the Human Eye*.—Matheissen is of opinion that the means for effecting the achromatism of optical impressions are arranged by nature external to the real optical apparatus of the eye. This opinion is contradicted by Valée, who states that the strong converging pencils of light emergent from the crystalline lens are brought to a point (*appareil acuteur*) by the vitreous humour, which he considers is composed of layers of different density, and that the rays of different colours are thus brought into one line. (*Compt. Rend.*, xxii. pp. 875 and 1096.) Pappenheim has measured the ratios of refraction of the vitreous humour in the anterior and posterior layer. He has found the former to be 1.3339 and 1.3343, the latter 1.3371, differences which are, at all events, too slight to justify Valée's *appareil acuteur*. (*Compt. Rend.*, xxv. p. 901. *Liebig's Report*, vol. i. p. 166.)